

ABSTRACT OF THE DISCLOSURE**MEANS OF COMPENSATION TO INCREASE THE CONTRAST RATIO OF LCoS  
BASED VIDEO PROJECTION SYSTEMS**

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10 An arrangement of optical components and orientation thereof that performs both skew ray compensation and reduction of residual retardation in LCoS based display devices. A principle axis of a quarter waveplate oriented is aligned parallel to reference axis, and a microdisplay device is coupled  
15 to the quarter waveplate and oriented at an angle  $\theta_0$  such that an optical "axis" of the microdisplay is optimally oriented for residual retardation compensation with respect to the linearly polarized light input to the microdisplay from the quarter waveplate when the reference axis is parallel to an axis of  
20 linear polarization of light incident to the quarter waveplate. A quarter waveplate and a half wavplate are oriented at  $1/2$  theta and a microdsiplay is oriented at theta. A prism assebly contructed using microdsiplay packages that simultaneously perform skew ray and residual retardation compensation.

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